

ABSTRACT OF THE DISCLOSURE

In forming a high density plasma oxide film, a projection shaped like the mesa, the peaked roof, the cone or the like is formed on an element
5 formation region.

This projection gives rise to a problem of producing a polishing scar when the CMD (Chemical Mechanical Polishing) with a ceria slurry is performed.

A film having a polishing rate equivalent to the one of the high density
10 plasma oxide film is formed on the high density plasma oxide film to reinforce a projection in the shape of a triangular prism, a cone or such, and, thereafter, the polishing is carried out, using a ceria slurry.

In another method, after the first CMP polishing is performed, using a silica slurry containing grains of small particle size which make no aggregation,
15 the second CMP polishing is performed, using a ceria slurry.